



Gates Learjet 35A/S

The Learjet 35A/S is an American twinjet. The Learjets of the Finnish Air Force carry the military designation LJ and are flown in the material and personnel transport and aerial photography roles. They also have provisions for installation of an air sampling kit and performing aerial photography and maritime surveillance missions. The aircraft are operated by the Supporting Air Operations Squadron of Satakunta Air Command.

The Learjets are flown with a two-pilot crew and they can carry a maximum of five passengers and a flight engineer. The aircraft's maximum range is 3,000 km.

History and development

The Learjet family of aircraft entered serial production in the 1960s. They are first and foremost known as business jets, but their roots are in military aviation. Certain design concepts used in the first Learjets were based on the Swiss FFA P-16 ground attack jet fighter designed in the 1950s

The manufacturing rights of a business jet progressively developed from the P-16 were purchased by the Lear Jet Corporation in the United States. Production was subsequently taken over by the Gates company and even later by Bombardier Aerospace.



The 35A, which first flew in 1973, is a second-generation Learjet incorporating a fuselage stretch, and it is many respects a much modernized derivative of the initial 20-series aircraft.

The Finnish Air Force bought its Learjets in 1982 to replace the obsolete Soviet Ilyushin II-28 bombers in target towing, cartography, and maritime patrol roles. The service was the first military customer for the aircraft.

To meet new mission requirements, the airframer fitted Finnish Learjets with underwing hardpoints for the carriage of external stores and special windows for aerial photography.

Starting grom spring 2018 Finnish Air Force Learjets will undergo an upgrade program that will extend their service life. The avionics systems, mission-specific equipment and the seating arrangements of the passenger compartment will modified to meet the modern-day requirement set for operating the aircraft in passenger and cargo transport, aerial photography and air sampling roles. The aircraft will also receive a new grey paint livery similar to rest of the Finnish Air Force liaison and transport aircraft fleet.

A total of 676 Learjet 35As have been built. The production line for the model closed in 1994.

Technical Data

Wing span: 12.03 m Length: 14.81 m Height: 3.73 m

Empty weight: 5,000 kg

Maximum operating weight: 8,300 kg

Structure: All-metal

Power plant: Two Garrett Airesearch TFE 731-2-2B turbofans, each rated at 1,588

kp (15.6 kN) of thrust

Maximum speed: Mach 0.78 at altitude, 555 km/h at low altitude

Ceiling: 12,500 m

Systems and equipment: Provision for installation of aerial photography equipment

and an air sampling kit

In service with the Finnish Air Force: 3

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